The SA GROUP

UNMANNED AERIAL VEHICLE (UAV)

ID SYSTEM

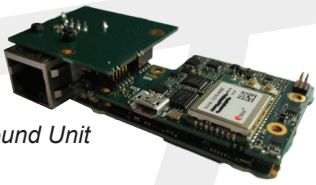
The system consists of transponders which are able to broadcast their identification and position. They can be configured to do that at a certain rate or only when it is interrogated by a predefined unit.

A Large number of transponders can operate in the same area. An overload will never occur, as you will always “see” the transponders closest to you.

Mobile Unit
Weight: < 30g
Size: 20mm x 50mm

Applications:

- Identification
- Tracking
- Detect and Aviod
- Situational awareness
- C2, (Command and Control)



Ground Unit

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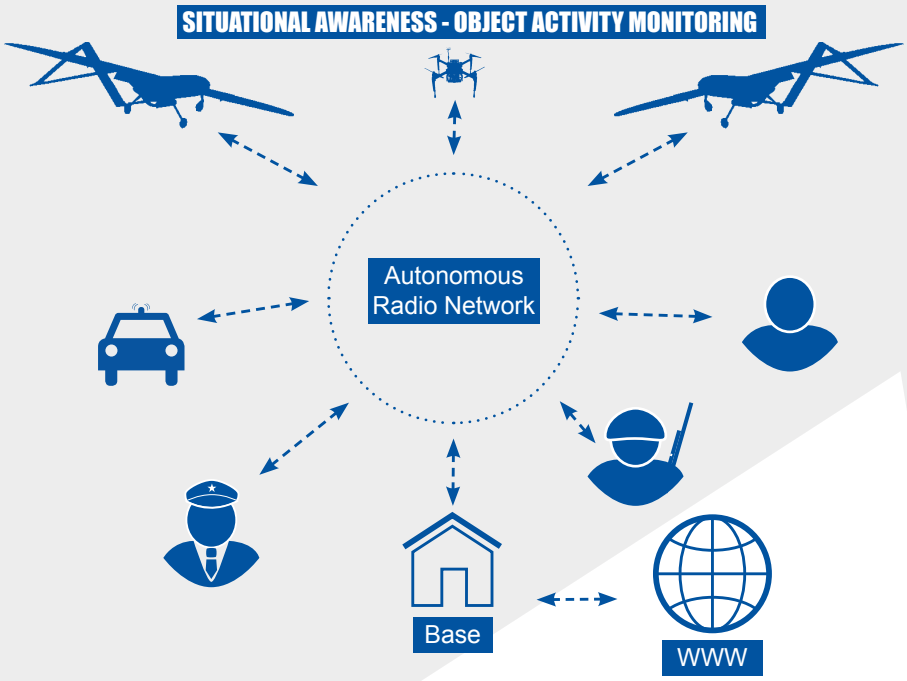
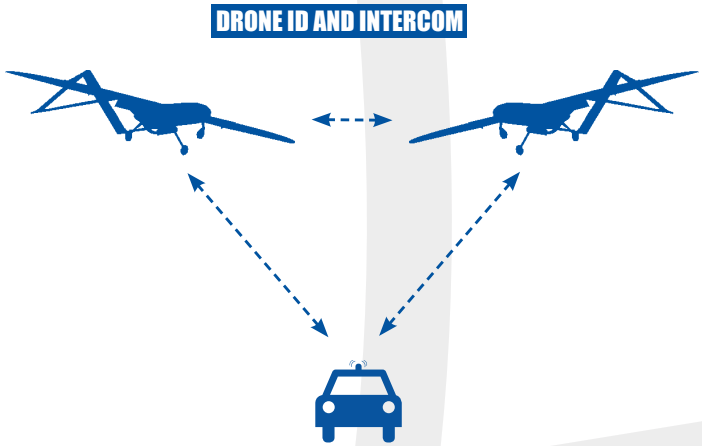
The transponders are made in two versions, a high power and low power version. The high power version is mainly intended for fixed installations where size, weight and power consumption is of no concern. The low power version is intended for applications where size, weight and power consumption is highly important.

The transponders are able to exchange information at a high rate between two units if necessary; alternatively it can broadcast to all units. Discrete I/O and Analog inputs provide the possibility of communicating the environmental condition of each transponder. All communication is encrypted, and performed on a single narrowband frequency.



Transponder features:

- Narrowband (12,5- or 25kHz channel) can operate in Aviation, Land mobile, and cellular frequency bands
- All transponders can operate on one single predefined frequency
- No need for Base- or ground station
- Air to Air, Air to Ground and Ground to Air communication
- Well proven VDL Mode 4 Aviation technology
- Handling 4500 Transponders within Line Of Sight @ 1 min. update rate
- Handling 75 Transponders within Line Of Sight @ 1 sec. update rate
- AES128 Encryption
- Built-in GPS
- Built-in SD Card, for Activity Logging
- Built-in Accelerometer and Barometric sensor
- Two Discrete I/O
- Two A/D inputs
- Optional bidirectional Serial data port for interfacing to other systems
- Maintenance data port
- Weight: < 30g (low power version)
- Size: 20mm x 50mm (low power version)
- External power input 5-12 VDC



The transponder has two bidirectional serial data ports. One for maintenance and one for interfacing to other systems like a tablet or smartphone showing a map of your own position, as well as all other transponders within range. A list of nearby transponders will show information about unique identification, position, direction, elevation, velocity, and optional data based on installed sensors. The high power transponder version also provides Bluetooth interface, which makes it very easy to connect to tablets or smartphones.

The SA Group provides UAV services as assembly, MRO, upgrades etc. SA is part of UAV Test Center Denmark, and coorporate with other companies in regards to total UAV solutions. SA applies to UAV standards and regulations, all based on our expertise and knowledge of 37 years+ within avionics in the aviation industry.

The SA Group holds the following approvals:

- EASA/FAA Part-145 Maintenance Organization Approval
- Part-21J Design Organization Approval
- Part-21G Production Organization Approval
- Part-147 Training Organization Approval
- A number of local Maintenance Organization Approvals

Please feel free to contact us today to discuss your specific requirements.

Scandinavian Avionics provides complete turn-key avionics solutions, including avionics logistics and parts support, maintenance (MRO), certification, design & engineering, installation, product development, training and consultancy services with the primary business platforms being larger helicopters, corporate aircraft, regional airliners and defense electronics.

Scandinavian Avionics is the headquarters of The SA Group – an experienced avionics organization with divisions in Sweden, Norway, Czech Republic, Greece, Malaysia, Bahrain, CIS (in process) and India. Since the foundation in Billund, Denmark in 1978, core values like quality, reliability and flexibility have been deeply rooted in the organization and are the main reasons for the excellent reputation among aircraft operators around the world today.

SCANDINAVIAN AVIONICS A/S, STRATUSVEJ 9, DK-7190 BILLUND, DENMARK | p: +45 7950 8000 | f: +45 7950 8099 | m: sa@scanav.com
WWW.SCANAV.COM | FIND YOUR LOCAL SA DIVISION AT WWW.SCANAV.COM/CONTACT/